

MAHONING MINING COMPANY

Sherman Joiner 45 Acre Tract

Hole No. 1

Elevation: 510.23

Location: 785.8 feet S. and 338 ft. W. of Northeast

Corner of Sherman Joiner 45 Acres.

Drilled by: B. W. Balas

Examined by: E. A. Bracke

Casing: 2 1/2"

Started: 9-25-42

Finished: 10-19-42

Water: 100-105

0	-	25	Soil, clay and sand boulders.
25	-	30	Gray sand shale partings.
30	-	65	Light gray shelly sand.
65	-	80	Gray sand, shaly partings.
80	-	85	Shale, sand and gray lime. (Drilled hard)
85	-	90	Shaly gray lime.
90	-	95	Gray lime slightly oxidized.
95	-	100	" " " " " considerable calcite.
100	-	110	Gray lime, considerable shale, little calcite some oxidized material.
110	-	130	Gray lime, quite muddy, some crinoid stem segments.
130	-	135	Gray shale.
135	-	140	" " and pink shale.
140	-	160	" " "
160	-	195	" " some gray lime.
195	-	225	Gray shale, little brown lime.
225	-	280	White sand and black shale.
280	-	290	" " " " " , zn shines, crevice 289-290.
290	-	310	" " " " " "
310	-	320	Hard white sand.
320	-	330	Gray shale with sand streaks. P.C.
330	-	340	Gray sand with shale streaks.
340	-	360	Gray sand with shale partings.
360	-	395	Shally white sand.
395	-	400	" " " " trace zn and Pb?
400	-	417	Hard white Bethel sand. Base of Bethel 417.
417	-	435	Gray lime.
435	-	440	Gray sandy lime.
440	-	445	Gray lime with much pink material.
445	-	455	" " and green selvage.
455	-	495	Dark gray and brown shaly lime.
495	-	528	Rosiclare sand.
528	-	540	Gray colitic lime some selvage.
540	-	545	" " " " considerable selvage.
545	-	565	Gray and brown lime.
565	-	580	Dark brown lime.
580	-	590	" " " " some Sub Rosiclare sand.
590	-	595	Sub Rosiclare sand and light brown lime.
595	-	615	Brown lime becoming darker with depth.

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Sherman Joiner 45 Acre Tract
 Drill Hole No. 2
 Elevation: 537.04
 Location: 86 feet North and
 122' West of #1

Started 10-20-12
 Finished: 11-5-12
 Water: 130-135 feet

Drilled by: E. W. Bales
 Examined by: E. A. Brecke
 Casing 22 feet

0-20 Soil and clay
 20-50 Red clay with sand and Glen Dean lime
 50-85 Gray and black shaly sand
 85-115 white sand some shaly partings
 115-120 " " " " " little gray lime
 120-165 Dark gray lime, some crinoid stem segments, trace calcite
 165-170 Gray and red shale
 170-255 Gray shale, few streaks of lime
 255-265 White sand shale streaks
 265-285 Black shale with gray sand streaks
 285-310 Gray and brown sand, little shale
 310-330 Hard white sand, trace calcite
 330-350 " " " "
 350-395 Gray and white sand with shale partings
 395-455 White shelly sand
 455-460 Some white shelly sand, considerable gray lime, Base of Bethel 455
 460-470 Gray lime
 470-480 " " slightly sandy and some selvage
 480-495 Gray oolitic and sandy lime
 495-535 Dark partly oolitic lime, some streaks of light gray lime
 535-565 Rosiclare sand
 565-580 White oolitic lime
 580-590 Brown and white lime, selvage, trace calcite
 590-605 Light brown lime
 605-625 Brown lime
 625-630 " " some Sub Rosiclare sand
 630-635 " " little Sub Rosiclare sand considerable white oolite.
 635-641 White oolitic lime.

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Sherman Joiner 105 Acre Tract

Hole No. 3

Elevation: 528.34

Location: 228 feet South and
8 feet East of #1

Drilled by: B. W. Pales

Examined by: A. G. Johnson and E. A. Brecht

Casing: None

Started: 11-7-02

Finished: 11-24-02

Water: 85-90 Little

125-130

275-280

0-10 Soil and clay
 10-60 Hardinturg sand
 60-65 " " some black shaly lime
 65-75 Dark shaly lime
 75-105 Gray lime
 105-115 Black shale
 115-120 Gray and pink shale
 120-205 Gray shale with lime streaks
 205-215 Black shale
 215-245 Shale with sand streaks. Base of Golconda 245
 245-260 Brown sand little shale
 260-270 White sand shale streaks
 270-305 White sand. Crevice 275-280
 305-315 Faint creek shale
 315-365 Gray sand with shale parting
 365-405 Hard white Bethel sand. Base of Bethel 405
 405-430 Gray and brown lime
 430-435 Green and pink lime, little selvage
 435-445 Gray lime selvage streaks
 445-480 Dark shaly lime slightly oolitic and sandy toward base
 480-510 Rosiclare sand
 510-520 Gray oolitic lime
 520-555 Gray lime with streaks of white oolitic and selvage
 555-580 Brown slightly sandy lime
 580-585 Light gray oolitic lime trace of Sub Rosiclare sand
 585-597 Light gray oolitic lime
 597-600 Gray lime.

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Sherman Joiner 45 Acre Tract
 Hole No. 4
 Elevation: 580.14
 Location: 173 feet North and 249
 West of #2
 Drilled by: P. W. Balas
 Examined by: A. G. Johnson & E. A. Brecks
 Casing: 16 feet.

Started: 11-27-42
 Completed: 12-14-42
 Water: 85 feet

0-10 Soil and clay
 10-30 Fine grained micaceous sandstone
 30-45 Mud sand particles
 45-60 Oxidized lime gray and fossiliferous
 60-75 Dark lime fossiliferous
 75-100 Oxidized shale lime streaks
 100-120 Gray sand shale parting
 120-140 Gray to black sand, some shale
 140-155 Gray sand
 155-210 Light gray sand
 210-250 Gray lime shale streaks
 250-260 Gray shale lime streaks
 260-265 Red and gray shale
 265-350 Gray shale few limestone streaks. Base Golconda
 350-390 Gray sand and shale
 390-445 White to gray sand. Crevice 435-440
 445-460 Gray sand shale streaks
 460-475 " " few shale streaks
 475-515 Gray shelly sand
 515-520 Con. gray sand, little gray lime, spar and Zn shines. Base Bethel 518.
 520-540 Gray shaly lime, trace low grade spar.
 540-555 Dark lime some shale
 555-575 Dark brown shaly lime
 575-585 Rosiclare sand
 585-612 " " calcite, trace low grade spar Rosiclare 612
 612-625 Gray lime some yellow material trace Zn?
 625-630 Gray lime and green selvage
 630-645 Light brown lime trace spar, Pb and Zn
 645-665 Brown lime, spar and Zn shines, trace Pb at base
 665-670 " " light calcareous Sub Rosiclare sand, trace white colite
 spar and Zn shines, trace Pb.
 670-685 White colitic lime spar and Zn shines, trace Pb.

Assays:

665-680 Averages 15.69 CaF2
 3.05 Zn
 .10 Pb

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Sherman Joiner - 45 Acre Tract
 Hole No. 5
 Elevation: 587.71
 Location: 42° N. 62° W. of #4
 Drilled by: E. W. Bales
 Examined by: A. G. Johnson
 Casing: 20 feet

Started: 12-14-42
 Completed: 1-22-43
 Water: 130 feet

0-30	Soil and clay
30-60	Gray sand
60-70	Red mud & shale. Probable base of tar springs
70-105	Light gray fossiliferous lime
105-120	Dark colored shaly lime, some shal
120-130	Dark colored sand lime
130-150	Sandy shale. Probable base of Glen Dean ls.
150-175	Sand - shale streaks
175-230	Gray sand. Probable base of Hardinburg sand.
230-275	Gray lime
275-280	Lime & shale streaks
280-295	Mostly shale, some chocolate colored
295-370	Shale - lime streaks
370-385	Mud & shale - very soft
385-400	Mud & shale - sandy
400-415	do pyritic
415-435	White sand
435-485	Shelly gray sand
485-515	White sand. Base of Bethel 515 feet.
515-535	Gray & brown lime
535-555	Brown lime, selvage seams
555-595	Dark colored shaly lime
595-623	Rosiclare sand
623-630	Light gray oily oolitic lime
630-635	Gray lime - selvage streaks
635-660	Gray lime
660-685	Gray and brown lime
685-690	Light gray oolitic lime
690-700	Light gray oolitic lime Few ZN shs.

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Sherman Joiner 45 Acre Tract
 Hole No. 6
 Elevation 572.06
 Location: 36° S 48° E. of #4
 Drilled by: B. W. Bales
 Examined by: A. G. Johnson
 Casing 19 ft.

Started: 1-22-43
 Completed: 2-13-43
 Water: 80 ft.
 No lower water noticeable.

0-10	Soil and clay
10-40	Oxidized sand
40-65	Red mud opening
65-80	Gray Oxidized lime
80-125	Gray sand - shale seams
125-195	White sand. Base of Hardinburg.
195-225	Gray lime, shale seams
225-245	Dark gray lime, mud and shale seams.
245-250	Chocolate colored shale.
250-300	Black shale
300-310	Gray lime, shale streaks
310-325	Dark gray lime
325-340	Shale and mud
340-370	Shale, sand streaks
370-440	White cypress sand
440-445	Gray sand, shale seams
445-475	Gray shelly sand
475-536	White sand. Base of Bethel 536
536-570	Gray lime.
570-593	Rosiclare sand
593-605	Gray lime
605-635	Gray lime
635-645	Brown lime
645-660	Brown siliceous lime
660-672	White oolitic lime